

ABB BALDOR RELIANCE III

Customer information packet

WDL3504

.5HP, 1740RPM, 1PH, 60HZ, 56, 3520L, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	.500 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.450 A @ 208.0 V 3.500 A @ 230.0 V 7.000 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	66.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	3.5 a

Part Detail

Revision	F
Type	AC
Mech. spec.	35J271
Base	
Status	PRD/A
Elec. spec.	35WGG470
Layout	35LYJ271
Eff. date	06-25-2026
CD Diagram	CD0001
Poles	04
Leads	6#18
Proprietary	False
Created date	08-01-2022

Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520L
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.23 IN
Power Factor	70
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1740 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1496L											
CAT.NO.	WDL3504										
SPEC.	35J271G470										
HP	.5										
VOLTS	115/230										
AMP	7/3.5										
RPM	1740										
FRAME	56		HZ	60				PH	1		
SER.F.	1.25		CODE	L	DES	N		CLASS	F		
NEMA-NOM-EFF	66		PF	70							
RATING	40C AMB-CONT										
CC											
DE	6205		ODE	6203							
ENCL	TEFC		SN								
	SFA 8.2/4.1										

Parts List

Part number	Description	Quantity
SA407277	SA 35J271G470	1.000 ea
RA398776	RA 35J271G470	1.000 ea
EC1400A03SP	ELEC CAP, 400-480 MFD, 125V, 1.81D X 3.	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3008A01G	SPL CONDUIT BOX, MACHINED GRAY	1.000 ea
35GS1039	05 MOLDED GASKET W/LIP, 1.12 LEAD HOLE,	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3122B00W	MASTER ODE,203 BRG,.683SH,.125NPT DRNS,F	1.000 ea
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
51XB1016A06	10-16X3/8 HXWSSLD SERTYB	4.000 ea
35CB4802A02SP	CAPACITOR COVER, STAMPED X	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3123E00W	MASTER DE,205 BRG,1.623SH,.125NPT DRNS(W	1.000 ea
HW4072A01	BLACK DRAIN PLUG FOR .125 NPT	3.000 ea
HW4600B49	SEAL 0.938 X 1.624 X 0.250 SINGLE LIP DB	1.000 ea
XY1032S02	10-32 HEX NUT R.H. S STL	4.000 ea
35FH4005A32	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
11XW1032S06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	3.000 ea
35CB4522	35 LIPPED CB LID PRIMED	1.000 ea
35GS1030A02	35 GS FOR CB LID - WHITE NEOPRENE	1.000 ea
59XW0832S07	TAPTITE II,HEX WSHR UNSLTD SER,410 S.S.,	4.000 ea
HW4600B39SP	V-RING SLINGER 0.550 X 0.790 X .18 VITON	1.000 ea
HW4600B46	V-RING SLINGER 0.875 X 1.420 X .24 VITON	1.000 ea
HW2502D13	SS KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
LB1164	LABEL,WARNING AND DRAIN	1.000 ea

HA5027A02	HA4054 T-DRAIN X2 BAGGED WITH LABEL	1.000 ea
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
35GS1016A03	GASKET, CAPAC BOX FOR 35CB4802 WD MOTORS	1.000 ea
MG1025Z02	ACTIVATOR WILKOFAS 060.02HF 55 GALLON	0.010 ga
MG1025W01	WILKOFAS 781.01, SIGNAL WHITE #9003	0.017 ga
HA3100S07	THRUBOLT 10-32 X 8.375 SS	4.000 ea
SP5051A24	MODEL 35 TORQ STATIONARY SWITCH FOR "L"	1.000 ea
LC0001	CONN LABEL TYPE L, 6 LEAD, DUAL VOLTS, R	1.000 ea
NP1496L	SS WD UL CC	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000002	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 94791

Typical performance - not guaranteed values

Winding: 35WGG470-R001			Type: 3520L		Enclosure: TEFC	
Nameplate Data			115 V, 60 Hz: Low Voltage Connection			
Rated Output (HP)		.5	Full Load Torque		1.511 LB-FT	
Volts		115/230	Start Configuration		direct on line	
Full Load Amps		7/3.5	Breakdown Torque		4.22 LB-FT	
R.P.M.		1740	Pull-up Torque		3.95 LB-FT	
Hz	60 Phase	1	Locked-rotor Torque		6.21 LB-FT	
NEMA Design Code		N KVA Code	Starting Current		43.3 A	
Service Factor (S.F.)		1.25	No-load Current		5.29 A	
NEMA Nom. Eff.	66 Power Factor	70	Line-line Res. @ 25°C		1.3669 Ω A Ph 2.3003 Ω B Ph	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		62°C	
S.F. Amps		8/4	Temp. Rise @ S.F. Load		78°C	
			Locked-rotor Power Factor		98.3	

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	35	49	61	70	77	82	77
Efficiency	42.8	57.5	63.6	65.7	65.6	63.7	65.6
Speed	1781.1	1768.1	1752.9	1735.9	1715.7	1690.5	1716
Line amperes	5.38	5.7	6.26	7.01	8.01	9.26	8.01

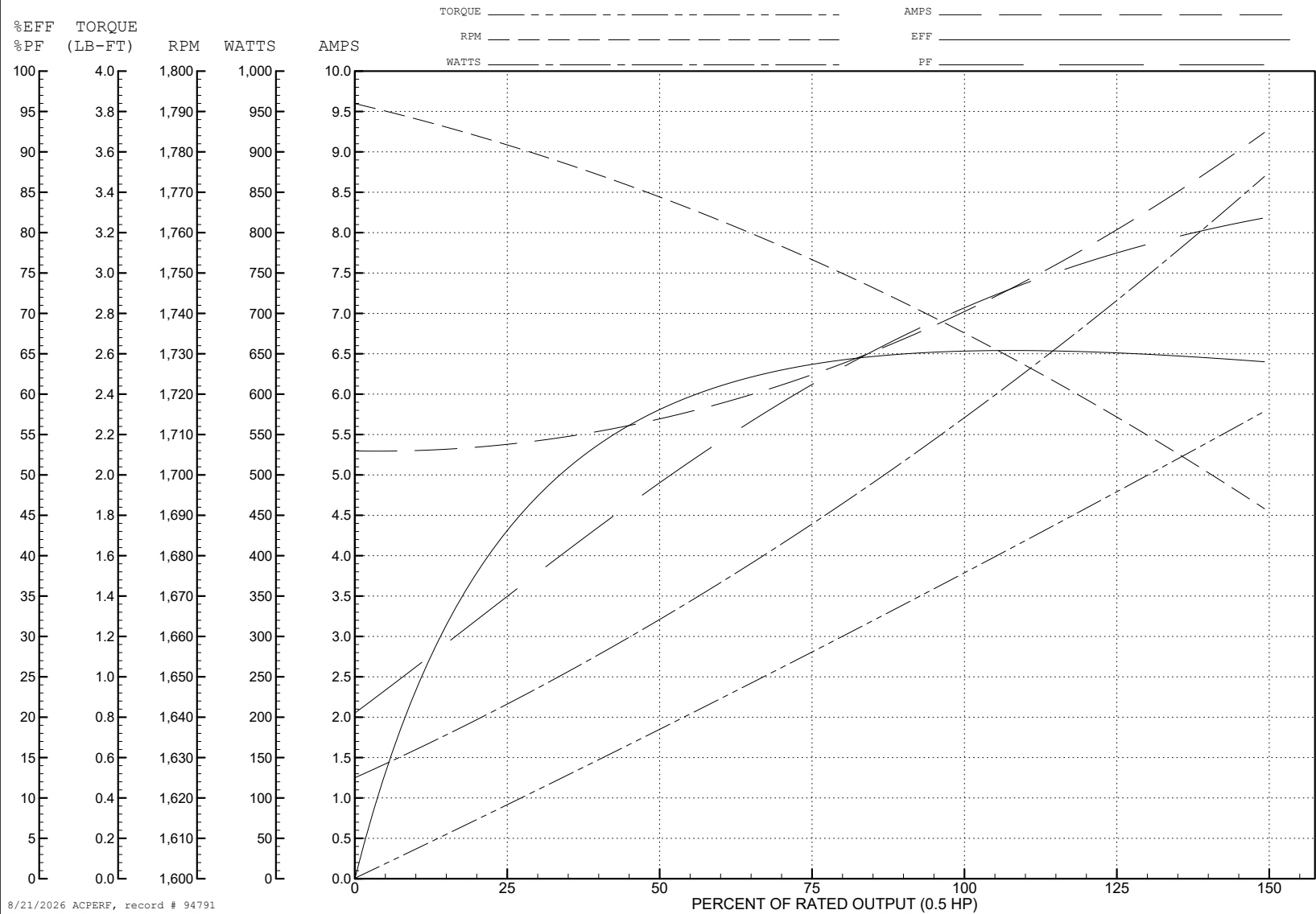
ABB Motors and Mechanical Inc.

WINDING # 35WGG470

Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 1740 RPM 115 V 3520L

TORQUES (LB-FT) : PO=4.22 PU=3.95 LR=6.21 LRA=43.3



CD0001

